

ABSTRACT

A navigation system includes a navigation-related information server and one or more customer-interface servers. Each customer-interface server receives requests for navigation-related information from end users who have end user computing platforms. The end users send their requests for navigation-related information from end user computing platforms over a data network to the customer-interface servers. In order to respond to the end users, the customer-interface servers request language and format-independent navigation-related information from the navigation-related information server. The navigation-related information server receives the requests from the customer-interface servers. To response to each request for navigation-related information, the navigation-related information server uses one or more geographic databases to formulate language- and format-independent data structures. These language- and format-independent data structures are sent to the customer-interface servers. The customer-interface servers receive the language- and format-independent responses from the navigation-related information server, and formulate language- and format-specific responses that are sent to the end users. In one embodiment, the language and format-independent responses provided by the navigation-related information server are in XML format. The customer-interface servers use XML style sheets to formulate language and format-specific instructions that are sent to the end users.